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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/694,345	10/28/2003	Richard E. Walters	03-384 2569		
7590 01/04/2007 Marvin S. Towsend Patent Attorney 8 Grovepoint Court Rockville, MD 20854			EXAMINER BEISNER, WILLIAM H		
			ART UNIT	PAPER NUMBER	
•			1744		
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE		
3 MONTHS		01/04/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Applicatio	n No.	Applicant(s)				
Office Action Summary		10/694,34	5	WALTERS ET AL.				
		Examiner		Art Unit	,			
		William H.		1744				
Period fo	The MAILING DATE of this communication ap or Reply	pears on the	cover sheet with the c	orrespondence ad	ldress			
WHIC - Exter after - If NO - Failu Any	CHEVER IS LONGER, FROM THE MAILING DESIGNATION OF THE MAILING DESIGNATION O	DATE OF TH .136(a). In no eve d will apply and will te, cause the appli	IS COMMUNICATION nt, however, may a reply be time expire SIX (6) MONTHS from cation to become ABANDONEI	I. lely filed the mailing date of this c O (35 U.S.C. § 133).				
Status								
1)	Responsive to communication(s) filed on							
	<u> </u>	— is action is no	on-final.					
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
,—	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims	•						
4)⊠	Claim(s) 1-7 is/are pending in the application.							
-	4a) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.							
6)⊠	6)⊠ Claim(s) <u>1-7</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8)□	Claim(s) are subject to restriction and/o	or election re	quirement.					
Applicati	on Papers							
9)	The specification is objected to by the Examin	er.						
10)⊠ The drawing(s) filed on <u>10/28/03</u> is/are: a)⊡ accepted or b)⊠ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	ınder 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
2) Notic 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	ite				

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DETAILED ACTION

Drawings

1. The drawings are objected to because the hand labeling is difficult to read and the "FOR REFERNCE ONLY" section of Figure 4 is difficult to read. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 5. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malin et al. in view of Giaever et al.

The reference of Malin et al. discloses a multiple electrode pair array apparatus (10) for use with a multiple well plate (14) having multiple wells (16) distributed in a two-dimensional matrix array having R rows and C columns. The apparatus includes a non-conductive base member (20) and an array of pairs of electrodes (38). The reference discloses that each electrode

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includes an individual trace such that an alternating current voltage can be selectively applied across each pair of electrodes (See column 5, lines 1-61).

Claim 1 differs by reciting that the apparatus includes plural row conductors wherein each conductor is electrically connected to corresponding first electrodes in a corresponding row of first electrodes and a plurality of column conductors wherein each conductor is electrically connected to corresponding second electrodes in a corresponding column of second electrodes and are perpendicular to the row conductors.

The reference of Giaever et al. discloses that it is known in the art to electrically connect the first electrodes (18) in a row to a row conductor (36) and to electrically connect the second electrodes (30) in a column to a column conductor (38) that is perpendicular to the row conductors (36). In view of this teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the electrodes of the primary reference with common conductors as suggested by the reference of Giaever et al. for the known and expected result of providing an alternative means recognized in the art for selectively selecting a pair of electrodes within an array or matrix of electrodes to be electrically connected to a voltage or current source.

With respect to claim 2, the first and second electrodes of Malin et al. are parallel to one another.

With respect to claim 3, whether the conductive traces are provided on the top surface or bottom surface of the base member would have been well within the purview of one having ordinary skill in the art while providing the required electrical connections suggested by the prior art references.

With respect to claim 4, the spacing of the electrode pairs is such that they can be received within the wells of a well plate device.

With respect to claim 5, if electrical connectors are not inherently encompassed by the combination of the references, the use of electrical connectors for electrically connecting the base member or board with a control device would have been obvious for the known and expected result of allowing the control device to be easily connected with a plurality of different base members.

With respect to claims 6 and 7, the provision of access openings within the base member would have been obvious to one of ordinary skill in the art for the known and expected result of providing access to the wells during use of the electrode pairs for adding and/or removing samples and/or reagents.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The references of Maher et al.(US 2002/0025573); Walters et al.(US 6,117,660); King et al.(US 6,352,853); and Hilliard et al.(US 4,695,547) are cited as prior art references that pertain to the use of electrode pairs with multiple well devices.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Beisner whose telephone number is 571-272-1269. The examiner can normally be reached on Tues. to Fri. and alt. Mon. from 6:15am to 3:45pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys J. Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

William H. Beisner Primary Examiner

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WHB